Working with other people can be tricky. It's a skill I try to teach in my classroom, and as a new teacher I'm learning that it's harder than I thought. Many of my students have an extremely difficult time engaging with their peers in class in a meaningful way, don't want to work with anyone outside of their small group of friends, and have trouble expressing themselves in a polite and respectful manner. When discussing this issue with my lesson study team, it was relieving (to know I wasn't alone) but also alarming to realize this kind of situation was happening in their classes, too. For our problem of practice, we want to answer the question of how to create structures and systems that allow students to see the value of working together with their peers and engaging in academic and meaningful ways.

For this assignment I read an article on Complex Instruction and interviewed a coworker at my school, John Santos. Complex Instruction is a pedagogical approach that helps teachers come up with and design group worthy tasks (Tomlinson 2018). The idea being that instead of assigning multiple students to work on a task that one student could do effectively on their own, assignments should be designed in ways that allow for clear group roles, call on multiple intellectual abilities, and require both student interdependence and individual accountability. In the article, Tomlinson (2018) discusses a far too common scenario, where students in a group who have confidence in their ability commandeer the work, complete it to specifications, and then become angry with the students who didn't contribute to the task. "In the minds of the students who did the work, the other two peers are freeloaders. In the minds of the two nonparticipants, they were frozen out" (p. 9). To avoid this situation, teachers who follow the Complex Instruction model should create assignments that are open ended, rooted in complex issues, and rely on student creativity and insight to address dilemmas (Tomlinson 2018).

John Santos, the 11th and 12th grade Environmental Science teacher at High Tech High takes a different approach to collaboration and group work. I've been lucky enough to work with, and watch John's class in action on a number of occasions, and I've consistently seen students working together in ways that don't feel forced, unnecessary or designed by the teacher. In a recent discussion, John Santos explained to me that instead of creating assignments for group work, collaboration should happen naturally (Santos 2024). John teaches carpentry skills to his students, who all work on their own individual projects. However, because they are all working in the same workshop together, they are consistently seeing each other's progress and asking each other for help and support when needed. John explained, "When one student sees that another student knows how to use a certain tool, they'll ask them to explain how it works, and in this way collaboration happens naturally (J. Santos, personal communication, March 20, 2024).

In both Tomlinon's article on Complex Instruction and my interview with John Santos, the desire to have students working together in collaborative ways was an important part of the class culture. Whereas Complex Instruction relies on the teacher to put in the work to create situations that demand teamwork and collaboration, John Santos does his best to create an environment where collaboration among students happens naturally. Though I agree that Complex Instruction has the potential for meaningful collaboration and teamwork to happen among students, the lift required from the teacher to consistently turn out intricate and detailed lesson plans and projects seems overwhelming and unsustainable. Instead, I believe that the

best collaboration doesn't happen during assigned group work, or when one student needs help from another, but instead during group critiques.

Showing your work to other people is scary. It's easy to become defensive about your work, fear rejection from your peers, and feel unready to show something that isn't complete. Yet, I've also found it to be a place where everyones comes in on equal footing - each student is allowed to express their opinion, discuss their own perspectives, and engage in meaningful discussion. Academic status is removed from the equation as everyone is entitled to their own ideas. Critique can and should happen in both formal and informal ways. Similar to how John Santos structures his class, I have my students work on individual projects in the same space, so that students are always seeing what others are doing. A passing, "Hey that looks really cool" or a, "Your painting looks great, can you show me how to put gesso on mine?" goes a long way to building trust and the kind of environment that encourages students to collaborate naturally. Similarly, formal critique protocols where students bring what they've been working on and present their progress to a group of their peers holds students accountable while also giving them opportunities to hear valuable ideas, perspectives, and thoughts from their peers that they might not have been able to arrive at on their own.

Learning to work with others, listen to feedback, be open to new ideas and collaborate effectively is a life-long process. I'm still actively learning how to work with my coworkers, my students, and build relationships of trust with both groups. Practices such as Complex Instruction, creating space where students consistently see each other's work, and dedicating time to critique protocols are all effective ways at giving students opportunities to hone their skills of working together effectively.

References

Tomlinson, C. A. (2018). Complex instruction: A model for reaching up—and out. *Gifted Child Today*, *41*(1), 7–12. https://doi.org/10.1177/1076217517735355